Planning Rationale: Draft Plan of Subdivision and Rezoning

3387 Borrisokane Road

September 2016

Prepared for:

GLENVIEW HOMES (CEDARVIEW) LTD.

190 O'Connor Street, 11th Floor Ottawa, ON K2P 2R3



commercial I management I homes

Prepared by:



J.L. RICHARDS & ASSOCIATES LIMITED

864 Lady Ellen Place Ottawa, Ontario K1Z 5M2

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1.0 INTRODUCTION

This report has been prepared by J.L. Richards & Associates Limited (JLR) on behalf of Glenview Homes (Cedarview) Ltd. (Glenview) to support applications for Draft Plan of Subdivision and Zoning By-law Amendment for property known municipally as 3387 Borrisokane Road.

The application for Draft Plan of Subdivision seeks approval for lots and blocks of detached dwellings and townhouses dwellings fronting onto a new local street pattern – including a new collector road – intersecting with the existing arterial Borrisokane Road. The Draft Plan of Subdivision also proposes a commercial block, school block, park block, and stormwater management pond.

The application for Zoning By-law amendment requests the site be rezoned from Development Reserve to:

- R3YY[1909] (Residential Third Density) Zone for the residential lots/blocks,
- LC (Local Commercial) Zone for the commercial block,
- 01 (Parks and Open Space) Zone for the district and neighbourhood park blocks,
- I1A (Minor Institutional) / R3YY[1909] (Residential Third Density) Dual-Zone for the school block, and,
- 01 (Parks and Open Space) R3YY[1909] (Residential Third Density) Dual-Zone for the stormwater management pond block.

2.0 SITE LOCATION AND DEVELOPMENT PROPOSAL

2.1 Site Location

The municipal address of the subject property is 3387 Borrisokane Road, in Nepean (Ottawa). The site is located in the Barrhaven South area, on the east side of Borrisokane Road, south of the Jock River, north of Cambrian Road and to the west of Mattamy's Half Moon Bay development. The site has an area of 20.14 hectares, with 418.6 metres of frontage on Borrisokane Road and a lot depth of 475.4 metres. The subject property is legally described as Part of Lot 12, Concession 3 (Rideau Front), Nepean. Figure 1 demonstrates the sites location.



Figure 1: Key Plan - 3387 Borrisokane Road

The site is primarily cultivated with a few hedgerows along the property limits and between farm plots. The land is generally flat throughout the site, as can be seen in Figure 2.



Figure 2: Looking east from Borrisokane Road

2.2 <u>Surrounding Land Uses</u>

To the west of the subject property, across Borrisokane Road, is open space and provincial Highway ON-416. North of the site is more open space that hosts the river bed and floodplain of the Jock River. To the east and south of Glenview's property is the site of Mattamy's Half Moon Bay residential development.



Figure 3: Looking south on Borrisokane Road (Glenview site on left side of road)

A local landfill site is located to the south-west of the proposed Glenview development. However, the Draft Plan of Subdivision is not subject to the landfill's 500m influence area. Figure 4 depicts the landfill's influence area from the zone boundary (blue dotted line) and from its property line (white dotted line).

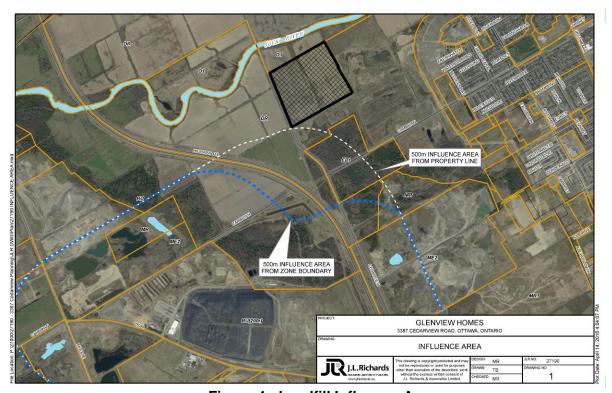


Figure 4: Landfill Influence Area

The subject property is roughly 3 km southeast of Barrhaven town centre. More specifically, the subject property is part of – and will extend – the Barrhaven South community, whose town centre is 1 km west of the site.

Barrhaven is host to many amenities including:

- Numerous schools such as: Adrienne Clarkson Elementary School, Barrhaven Public School, Cedarview Middle School, Grant Alternative School, Half Moon Bay Public School, Jockvale Elementary School, John McCrae Secondary School, Longfields-Davidson Heights Intermediate School, and South Carleton Secondary School;
- Recreational facilities found in the area including Half Moon Bay Park, Clarke Fields Park, Minto Recreation Complex, and numerous parks;
- Various multi-use and biking trails exist throughout the existing and planned communities and will be extended into these lands.

This 20.14 hectare Draft Plan of Subdivision will connect to the local arterial road (Borrisokane Road) and complete the local residential street pattern proposed by Mattamy's Half Moon Bay development in this part of the Barrhaven South.

2.3 <u>Development Proposal</u>

Stantec Consulting Ltd. prepared the Draft Plan of Subdivision for this project. This Draft Plan of Subdivision contemplates secondary land-uses in the institutional block (in the event of changes in market conditions) and the stormwater management pond block (to provide servicing flexibility with the adjacent Half Moon Bay development). These secondary land-uses result in three (3) potential development scenarios:

Scenario 1:

117 Lots for single detached dwellings, 17 blocks of townhouses, 2 blocks for parks/open space, 1 school block, 1 stormwater management pond block, 1 commercial block, and 7 streets.

Scenario 2:

128 Lots for single detached dwellings, 17 blocks of townhouses, 2 blocks for parks/open space, 1 school block, 1 commercial block, and 8 streets (no stormwater management pond).

Scenario 3:

179 Lots for single detached dwellings, 21 blocks of townhouses, 2 blocks for parks/open space, 1 commercial block, and 9 streets (no school or stormwater management pond).

Rights-of-way in the Draft Plan of Subdivision will be either 14.75m or 18m residential streets and are designed to connect with the street network proposed in the neighbouring development (Half Moon Bay). The draft plan also proposes a 24m collector road that will intersect with Borrisokane Road which will create a desirable node for commercial activity and public transit.

Figure 5 is the Draft Plan of Subdivision for Glenview's development. The blocks outlined in red represent those that vary through the three (3) scenarios described above.

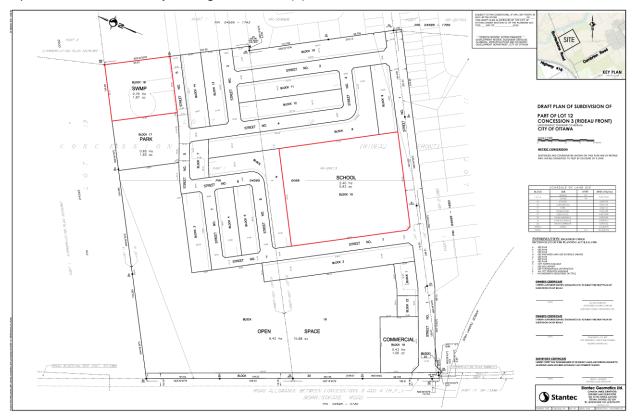


Figure 5: Draft Plan of Subdivision

Figure 6 and Table 1 further describe the Land Use distribution (by scenario) on Glenview's land.



Figure 6: Glenview - Land Use Plan

TABLE 1 – LAND USE DISTRIBUTION GLENVIEW'S LAND						
	Land Use	Area	Percentage			
ਰ	Residential	5.44 ha	27.01%			
ono	Neighbourhood Commercial	0.43 ha	2.14%			
d N	Schools	2.40 ha	11.92%			
7 ₹	Parks	0.65 ha	3.23%			
Scenario 1 (w/ school, w/ SWM pond)	Floodplain (Open Space)	6.40 ha	31.78%			
, en	Ditch Corridor (Open Space)	0.09 ha	0.45%			
Scolo	Stormwater Ponds & Tributaries (servicing)	0.76 ha	3.77%			
cho	Roads	3.625 ha	17.99%			
s /	Road Widening	0.34 ha	1.69%			
بح	Land Exchange	0.005 ha	0.02%			
	Total	20.14 ha	100%			
_	Land Use	Area	Percentage			
2 SWM	Residential	5.99 ha	29.74%			
	Neighbourhood Commercial	0.43 ha	2.14%			
ė, Š	Schools	2.40 ha	11.92%			
enaric ool, w/ pond)	Parks	0.65 ha	3.23%			
Scenario chool, w/c pond)	Floodplain (Open Space)	6.40 ha	31.78%			
Š	Ditch Corridor (Open Space)	0.09 ha	0.45%			
/w)	Stormwater Ponds & Tributaries (servicing)	0.00 ha	0.00%			
)	Roads	3.835ha	19.04%			

	Road Widening	0.34 ha	1.69%
	Land Exchange	0.005 ha	0.02%
	Total	20.14 ha	100%
	Land Use	Area	Percentage
nd)	Residential	7.90 ha	39.22%
(puod	Neighbourhood Commercial	0.43 ha	2.14%
≥	Schools	0.00 ha	0.00%
io 3 SWM	Parks	0.65 ha	3.23%
Scenario ool, w/o S	Floodplain (Open Space)	6.40 ha	31.78%
€ 5.	Ditch Corridor (Open Space)	0.09 ha	0.45%
Sco	Stormwater Ponds & Tributaries (servicing)	0.00 ha	0.00%
C C	Roads	4.325 ha	21.48%
Sce (w/o school,	Road Widening	0.34 ha	1.69%
)	Land Exchange	0.005 ha	0.02%
	Total	20.13 ha	100%

The draft plan is based on compliance with the acceptance of the requested rezoning application.

The requested R3YY[1909] Zone will permit:

- **Single detached dwellings** on lots with minimum widths of 9m and 220m² of lot area. The minimum front yard setback will be 3m, with 1.8m side yards and 2.5m exterior side yards. The minimum rear yard will be 6m. The maximum building height is 12m.
- **Townhouses** on lots with minimum widths of 5.5m and 137m² of lot area. The minimum front yard setback will be 3m, with 1.5m side yards and 2.5m exterior side yards. The minimum rear yard will be 6m. The maximum building height is 14m.

The requested LC Zone will permit:

• Commercial or mixed-use development with a 3m minimum front and corner side yard setback and a minimum 5m interior side yard setback. The minimum width of landscaped area will be no less than 3m. The building's maximum height is set at 12.5m.

The requested I1A Zone will permit:

• **Minor Institutional** use on a lot with a minimum width of 15m and 400m² of lot area. The minimum front yard setback will be 6m, with 3m interior side yards and 4.5m exterior side yards. The minimum rear yard will be 7.5m. The maximum building height is 11m. The maximum lot coverage will be 35%.

The requested 01 Zone will permit:

 Parks, Open Space and Stormwater Management uses. The park block and stormwater management pond block will be zoned O1 Parks and Open Space Zone – the zone that applies to other public parks and stormwater management facilities in the area.

Figure 7 illustrates the current and proposed zoning for 3387 Borrisokane Road.

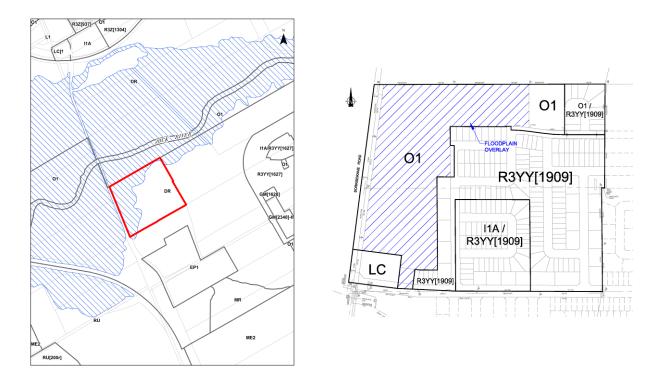


Figure 7: Current and proposed zoning for 3387 Borrisokane Road

3.0 POLICY AND REGULATORY FRAMEWORK

3.1 Provincial Policy Statement

The Provincial Policy Statement (PPS) under Section 3 of the Planning Act spells out key Provincial interests with regard to land use planning. Decisions made by all approval authorities in the Province on planning applications must be consistent with the policies of the Statement.

Generally, the PPS focuses growth within settlement areas (which includes the Barrhaven South Community) and away from areas that are either significant resources or may pose a significant threat to public health and safety.

The following is a brief commentary on the applications for Zoning By-law Amendment and Draft Plan of Subdivision with regard to the policies of the Provincial Policy Statement.

Part V of the PPS sets out Provincial policies on land use.

Section 1.1.3.1 indicates that settlement areas are to be the focus of growth. Glenview's site is within the Barrhaven South area, which is a settlement area under the PPS.

Section 1.1.3.2 states that land use patterns in settlement areas shall have densities and land uses that efficiently use land and appropriate for the services that are available. Glenview's proposed development presents a variety of uses that make efficient use of the land.

Section 1.1.3.7 indicates that new development should take place adjacent to the existing built up area. This Draft Plan of Subdivision is surrounded by existing or planned development.

Section 2 of the PPS calls for the protection of natural heritage, water, agricultural, mineral and cultural, and archaeological resources. Glenview's Draft Plan of Subdivision was developed in cooperation with the Rideau Valley Conservation Authority to ensure that the Jock River and its features would not be negatively affected by the development.

Section 3 of the PPS requires that development be directed away from areas of natural and man-made hazards. No hazards are present on the site or on adjacent properties.

In conclusion, approval of the applications for the proposed residential development at 3387 Borrisokane Road is consistent with the Provincial Policy Statement.

3.2 Planning Act

Section 51(24) of the Planning Act requires when an approval authority (the City of Ottawa) is considering a Draft Plan of Subdivision that regard be had, among other matters to the health, safety, convenience, accessibility for persons with disabilities and welfare of the present and future inhabitants of the municipality, and to the following:

(a) the effect of development of the proposed subdivision on matters of provincial interest

This Draft Plan of Subdivision is within an existing settlement area and makes efficient use of existing or planned infrastructure.

(b) whether the subdivision is premature or in the public interest

The Draft Plan of Subdivision is not premature. It is on land that was zoned Development Reserve (DR) for this exact type of development. Further, the proposed site is surrounded by existing or planned development that abuts an existing arterial street.

(c) whether the plan conforms to the Official Plan and adjacent plans of subdivision, if any

The Draft Plan of Subdivision conforms to the Official Plan which designates the site as General Urban Area. All of Glenview's proposed land uses are permitted in this designation. The streets proposed within the Draft Plan of Subdivision connect to an existing registered public arterial road and to the future Half Moon Bay residential development by Mattamy.

(d) the suitability of the land for the purposes for which it is to be subdivided

The site is suitable for an urban residential subdivision. This was determined through the processes that resulted in its designation as General Urban Area in the City's Official Plan and subsequently confirmed by background studies for this application.

(e) the number, width, location and proposed elevations of highways, and the adequacy of them, and the highways linking the highways in the proposed subdivision within the established highway system in the vicinity and the adequacy of them

The draft plan's street network consists of local 14.75m and 18m wide rights-of-way with a 24m wide collector road. The road system in the area is adequate and appropriate to support this development.

(f) the dimensions and shapes of the proposed lots

The proposed lot frontages and lot areas are appropriate and consistent with those of recently approved developments in the Barrhaven South area.

(g) the restrictions or proposed restrictions, if any, on the land proposed to be subdivided or the buildings or structures proposed to be erected on it and the restrictions, if any, on adjoining land

There are no known restrictions subject to Glenview's site.

(h) conservation of natural resources and flood control

Flood control is being designed through cut and fill practices in accordance and compliance with the Rideau Valley Conservation Authority.

(i) the adequacy of utilities and municipal services

Background reports completed in the design of the proposed Draft Plan of Subdivision confirmed that adequate utilities and municipal services are available.

(j) adequacy of school sites

According to the Community Design Plan for the area, which is supported by the City's Official Plan, the proposed school site within the draft plan is desirable and adequate.

(k) the area of land, if any, within the proposed subdivision that, exclusive of highways, is to be conveyed or dedicated for public purposes

Glenview's development includes parkland blocks to be used for recreation and stormwater management purposes that are to be conveyed to the City.

(I) the extent to which the plan's design optimizes the available supply, means of supplying, efficient use and conservation of energy.

Most of the lots in the Draft Plan of Subdivision are oriented to within 30 degrees of south so there is the possibility of some passive solar gain. However, the homes to be built on them will be built according to current Ontario Building Code standards which include requirements for energy conservation.

(m) the interrelationship between the design of the proposed plan of subdivision and site plan control matters related to any development on the land, if the land is also located within a site plan control area designated under subsection 42(2) of this Act or subsection 114(2) of the City of Toronto Act, 2006.

The lots are for single detached and townhouse dwellings and, therefore, are exempt to the City of Ottawa's Site Plan Control By-law, Section 4(1)(b). However, the proposed commercial block will be subject to Site Plan Control.

In conclusion, I am of the opinion that the approval of the Draft Plan of Subdivision meets the requirements of Section 51(24) of the Planning Act as due regard has been had for all of the matters listed in this Section.

3.3 Official Plan

The site is governed by the City of Ottawa Official Plan. Schedule B - Urban Policy Plan, which designates the site General Urban Area. Section 3.6.1 of the Official Plan sets out the land use policies for lands so designated.

Section 3.6.1.2 sets out criteria that the City will consider when evaluating development applications. The clause in this section indicates land development in the General Urban Area will be in accordance with Section 2.5.1 and Section 4.11 relating to compatibility and community design.

Design Objective 1 of Section 2.5.1 is to create places with their own distinct identity. This is a subdivision of custom built homes with a neighbourhood school, the project will have a distinct identity by its built form.

Design Objective 3 is to create places that are safe, accessible and easy to get to and move through. The Draft Plan of Subdivision extends from an existing arterial road to connect to Mattamy's Half Moon Bay residential development, resulting in the area being easier to get to and move through. Safe pedestrian circulation through the neighbourhood will be realized via a comprehensive network of sidewalks.

Design Objective 4 is that new development respects the character of existing areas. The proposed lot frontages and lot sizes are comparable with the adjacent residential subdivisions to the east and south of the site (Mattamy's development).

Design Objective 6 is to respect natural features in development design. The Draft Plan of Subdivision is subject to the Jock River floodplain. However, the floodplain will be altered to allow for construction. Through consultation with the Rideau Valley Conservation Authority, the floodplain's surface will be modified in the most ethical and ecologically sound way.

Section 4.11 relates to urban design and community compatibility.

Criterion a) emphasizes that roads should be adequate to serve traffic of the development. The proposed two lane street network is adequate to serve the traffic generated by the proposed development and its functions.

Criterion c) parking is to have adequate on-site parking. The lots are of a size that spill over parking is unlikely to occur on adjacent areas.

The proposed development is generally consistent with the City's evaluation criteria and accordingly can be deemed to be compatible with its surroundings.

In conclusion, it is my professional opinion that the proposed development is consistent with the design policies of the Official Plan as it conforms to its goals, objectives and intent.

3.4 Community Design

Community Design Plans are intended to translate the direction and policies of the Official Plan to the community level. They are comprehensive in nature and incorporate the planning policy context of the Official Plan, infrastructure servicing, transportation, environmental and economic impacts. Principles, policies and guidelines established in the CDP provide the direction required for the preparation and review of development applications within the community.

The City of Ottawa, in conjunction with principal landowners, initiated the development of a Community Design Plan (CDP) for the Barrhaven South Community. The CDP was completed in May 2006. Since that time a number of subdivision applications have been filed and approved within the community, and construction has begun to occur.

The Barrhaven South CDP establishes a wide range of design guidelines and development principles with respect to land uses, street system, parks and greenspace, the community core, mixed use, institutional uses, and residential densities, lot and building configuration (Figure 8). The CDP contains the following four major components:

- 1. Guiding principles that express the fundamental premises to be followed during the preparation and review of development submissions;
- 2. The plans for the study area: land use, demonstration plan, greenspace plan, and the supporting studies including a transportation master plan, subwatershed study and master servicing plan;
- 3. The community design guidelines that provide direction for the design of the built environment's components; and
- 4. Implementation strategy that highlights future actions for the CDP.



Figure 8: Barrhaven South CDP – Demonstration Plan

The following section discusses and compares the Land Use Plan for these lands with the principles of the Barrhaven South Land Use Plan, with particular regard to location of uses and residential unit mix.

The Land Use Plan (figure 9) for the Barrhaven South CDP area provides a summary of the distribution of land among each land use category. The uses of land that are proposed by the Barrhaven South CDP for Glenview's land are:

- Low-Medium Density Residential
- Neighbourhood Commercial
- Elementary School
- Parks
- 100 year Floodplain



Figure 9: Barrhaven South CDP - Land Use Plan

The Draft Plan of Subdivision includes the land uses prescribed for the site in the CDP, however, the layout of said uses are slightly rearranged from what is shown in the CDP's Land

Use Plan. Figure 10 demonstrates the organization of land uses proposed in Glenview's Draft Plan of Subdivision, which itself includes:

- · Low-Medium Density Residential,
- Neighbourhood Commercial,
- Elementary School,
- Parks,
- 100 year Floodplain (read as Open Space in Figure 10), and,
- Stormwater Management Facility.



Figure 10: Glenview - Land Use Plan

Glenview's arrangement of land uses is justified when specific contextual elements are taken into consideration.

The location of the elementary school and neighbourhood commercial sites are generally in the location prescribed by the Barrhaven South CDP. The same can be said of the 100 year

floodplain (open space use) that is affecting the Glenview site. These three (3) land uses are strikingly similar to what is recommended in the Barrhaven South CDP.

The Barrhaven South CDP suggests park space be located in the northwestern quadrant of the proposed property. However, this Draft Plan of Subdivision has proposed that park space be located slightly more to the east, in an equally suitable location while still in the north of the site. The decision to locate the park as per this Draft Plan of Subdivision is supported by Section 5.3.2 of the Barrhaven South CDP.

Section 5.3.2 Distribution of Parkland, suggests that good parks are well-distributed within communities and linked to a greater Greenspace Network. The CDP's Greenspace Plan (Figure 11) displays the Greenspace Network in Barrhaven South and how it is predominately to the north of the Glenview site. Parkland requirements in the CDP recommend that 11.9% of developable lands are dedicated for parks and leisure areas. The Open Space and Park blocks proposed in this Draft Plan of Subdivision easily surpasses the required parkland for this area.

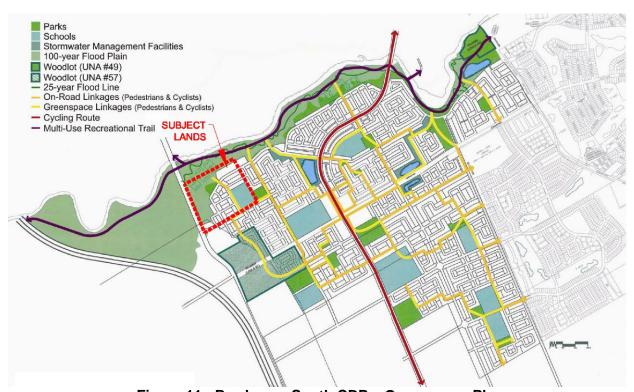


Figure 11: Barrhaven South CDP - Greenspace Plan

More so, Section 5.3.2's suggestion to distribute parks evenly within the community is influenced by the draft plan for Mattamy's Half Moon Bay development directly adjacent to Glenview's development. Having knowledge of Mattamy's Plan of Subdivision and future park space locations, Glenview's decision to place its neighbourhood park to the north of their site is justified.

The Stormwater Management Pond proposed in this Draft Plan of Subdivision is not part of the CDP's prescribed land uses for the Glenview site; however, it is abutting the area of the CDP's

Land Use Plan that does call for some type of stormwater treatment (displayed on Figure 8). Again, having knowledge of Mattamy's future Half Moon Bay development, and pending on their ability to accommodate Glenview's development in their stormwater management facility/feature, Glenview has proposed a place hold on the northeastern extent of their site.

Finally, the proposed residential distribution on Glenview's site contains desirable densities outlined in the Barrhaven South CDP; however, their distribution is slightly modified. The CDP's Land Use Plan shows a concentration of medium density residential in the southwest extend of the site (in proximity to the commercial and institutional uses). Glenview has proposed medium density residential units in direct proximity of the neighbourhood commercial and elementary school as well, however, some of their townhouse units extend further eastward than recommended in the CDP. Having knowledge of Mattamy's future Half Moon Bay development, Glenview foresees that higher density housing – such as their proposed townhouses – would be more desirable abutting the Half Moon Bay community as it will be host to many more auxiliary amenities.

Glenview's Draft Plan of Subdivision provides a slightly higher residential density that is prescribed in the Barrhaven South CDP.

The CDP establishes a total of 6,862 dwelling units and an overall residential density of 34 uph (units per net hectare) for the entire Barrhaven South community. Specifically, for Area 2 of the CDP (Figure 12), a total of 1,422 dwelling units and a residential density of 36 uph are prescribed.

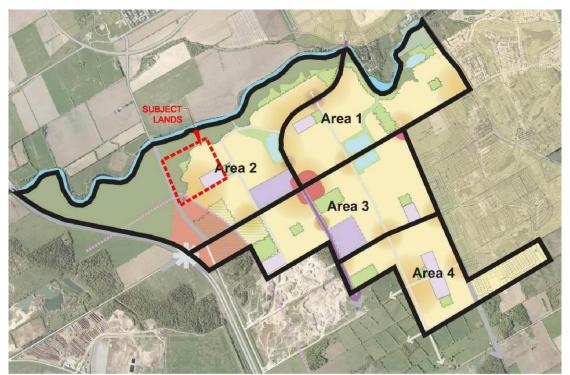


Figure 12: Barrhaven South CDP- Sub-Planning Areas

Table 2 demonstrates that Glenview's residential densities (in all scenarios of development) will respect the 36 uph prescribed for Area 2 of the Barrhaven South CDP.

TABLE 2 – UNIT DISTRIBUTION FOR GLENVIEW DEVELOPMENT							
	Unit Type	Units	Percentage	Residential Density			
Scenario 1	Singles	117	55.4%	38 uph			
Scenario i	Street Towns	94	44.6%				
	Totals	211	100%				
	Unit Type	Units	Percentage	Residential Density			
Scenario 2	Singles	128	57.7%	37 uph			
Scenario 2	Street Towns	94	42.3%				
	Totals	222	100%				
	Unit Type	Units	Percentage	Residential Density			
Scenario 3	Singles	179	62.1%				
Scenario 3	Street Towns	109	37.9%	36 uph			
	Totals	288	100%				

3.5 Zoning By-Law

The site is regulated by City of Ottawa By-law 2008-250 as amended. The site is currently zoned Development Reserve Zone DR, which limits the use of the lands until a more extensive proposal for development of the site is proposed. Figure 13 shows the current zoning of the site and its environs.

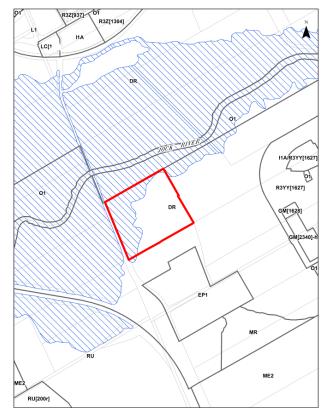


Figure 13: Current Zoning of Glenview's site and Adjacent Land

As noted earlier, the Draft Plan of Subdivision is based on compliance with a proposed rezoning of the site to allow:

- R3YY[1909] (Residential Third Density) Zone for the residential lots/blocks,
- LC (Local Commercial) Zone for the commercial block,
- 01 (Parks and Open Space) Zone for the district and neighbourhood park blocks,
- 01 (Parks and Open Space) for the park and stormwater management pond blocks.
- I1A (Minor Institutional) / R3YY[1909] (Residential Third Density) Dual-Zone for the school block, and,
- 01 (Parks and Open Space) R3YY[1909] (Residential Third Density) Dual-Zone for the stormwater management pond block.

The requested rezoning and their provisions are described in this document under Section 2.3. No exceptions or variances are being requested of the zoning's provisions or allowances. The lot sizes and development standards proposed are consistent with adjacent subdivisions.

Based on the preceding, it is our professional opinion that the requested rezoning and its intended development are reasonable and appropriate for the development of the site.

4.0 OVERVIEW OF TECHNICAL STUDIES

Resulting from the pre-consultation meeting with City Staff on March 21, 2016, the following technical studies were completed in support of these Applications. The following subsections summarize the findings of each study's respective report.

4.1 <u>Functional Servicing Study</u>

A comprehensive Functional Servicing Study was completed by David Schaeffer Engineering Ltd. in September 2016. The report included evaluation of multiple facets of the sites servicing including: Hydraulic Watermain Analysis; Grade Control and Drainage Plan; Stormwater Management Report; and Erosion and Sediment Control Plan.

i. Hydraulic Watermain Analysis

The subject property lies beyond the existing City of Ottawa BARR pressure zone. Existing BARR watermains serve the existing Mattamy Half Moon Bay development east of the subject property.

The City's BARR pressurized water supply network will be expanded to meet the water demands of the proposed concept plan, via the trunk watermain infrastructure identified in the MSSA. Detailed modelling will confirm phasing of the extensions of trunk watermains per the

MSSA, and sizing of the local watermain network. The proposed water supply design will conform to all relevant City and MOE Guidelines and Policies.

ii. Grade Control and Drainage Plan

Where existing grades in the subject property are below the 100-year floodplain elevation and are proposed to be raised, a permit under Ontario Regulation 153/06 will be required. Based on preliminary consultation with the RVCA, it is understood that the proposed fill is not expected to have a negative impact on the function of the Jock River and that the cut/fill floodplain proposal is approved in principal.

The following additional grading criteria and guidelines will be applied to detailed design, per City of Ottawa Guidelines:

- Driveway slopes will have a maximum slope of 5%;
- Slope in grassed areas will be between 2% and 5%;
- Grades in excess of 7% will require terracing to a maximum of a 3:1 slope;
- Rear house grades will be at least 0.30m above the spillover point in the swale;
- Front terrace grade will be at least 0.30m above overland spillover point on road;
- Swales are to be 0.15m deep with 3:1 side slopes unless otherwise indicated on the drawings; and,
- Perforated pipe will be required for drainage swales if they are less than 1.5% in slope.

iii. Stormwater Management Report

Three options are presented in support of development of the subject property, which deviate from the MSSA, but can meet City of Ottawa and MOE stormwater management requirements as set out in background studies and current standards. The options proposed are:

- a new Glenview stormwater management wet pond (modified from MSSA concept);
- oil and grit separator units; or
- redirecting flows to the planned Clarke stormwater management wet pond east of the site.

All scenarios require that enhanced quality control be provided, per the MSSA. All overland flows above those captured by the storm sewer system can be released unattenuated to the Jock River, per the MSSA.

The storm sewers will be sized by the Rational Method and inlet control devices (ICDs) will be used to restrict the capture rates to 2-year (PIEDTB-2016-01) or 5-year flow. Storm sewers sizing will be confirmed at the detailed design level, in conformance with MOE and City standards.

Low Impact Development techniques will be implemented, to promote infiltration of stormwater.

iv. Erosion and Sediment Control Plan

Prior to topsoil stripping, earthworks or underground construction, erosion and sediment controls will be implemented and will be maintained throughout construction.

Silt fence will be installed around the perimeter of the active part of the site and will be cleaned and maintained throughout construction. Silt fence will remain in place until the working areas have been stabilized and re-vegetated. Material stockpiles shall not be permitted within the Jock River floodplain.

Catch basins will have inserts installed during construction to protect from silt entering the storm sewer system.

A mud mat will be installed at the construction access in order to prevent mud tracking onto adjacent roads.

Erosion and sediment controls will be in place during construction.

4.2 Geotechnical Study

A geotechnical investigation was prepared by Paterson Group Inc. in September 2016 based on the proposed development plan. The objective of the investigation was to:

- Determine the subsoil and groundwater conditions at this site; and
- Provide geotechnical recommendations for the design of the proposed development including construction considerations which may affect its design.

From a geotechnical perspective, the subject site is satisfactory for the proposed residential development. However, due to the presence of the sensitive silty clay layer, the proposed development will be subjected to grade raise restrictions. The geotechnical assessment has provided recommendations to deal with this grade raise restriction, including a settlement surcharge program.

The report provides recommendations for: foundation drainage and backfill; protection against frost action; excavation side slopes; pipe bedding and backfill; groundwater control; winter construction; landscaping and outdoor structure considerations; and corrosion potential and sulphate. As the requested rezoning would permit dwellings or uses to be setback a minimum of 3.0m from the front yard, the geotechnical report recommends that low water demanding

trees with shallow roots systems that extend less than 1.5m below ground surface be planted where the tree is to be placed within 4.5m from the foundation wall.

4.3 <u>Headwater and Drainage Assessment</u>

In July 2016, Kilgour & Associates Ltd. completed the *Headwater Drainage Feature Assessment Glenview Homes and Mattamy Homes Properties on Cedarview Road*. The Headwater Drainage Feature Assessment indicates a management directive to:

- Maintain recharge for channels in the east and south of the site, and
- Mitigation for the channel on the west of the site.

4.4 <u>Community Transportation Study</u>

As per the City's request, a Community Transportation Study was completed by Stantec Consulting Ltd. in September 2016. The study found that all of the study area intersections are anticipated to operate acceptably under 2022 future conditions.

The study also found that a southbound left turn auxiliary lane – at Borrisokane Road and the Site Access road (proposed collector road) – was warranted. The study recommends the turning lane have a storage length of 25m.

Based on the transportation evaluation of the study, Glenview's proposed development at 3387 Borrisokane Road should be permitted to proceed.

4.5 Noise Feasibility Study

In July 2016, Stantec Consulting Ltd. completed a Noise Feasibility Study. The report expects noise level contours to be above City of Ottawa and Ministry of Environment criteria for potential units facing Borrisokane Road, the proposed collector road (Street 1 on draft plan) and Highway 416.

The following summarizes the measures required by the City of Ottawa and MOE criteria for the development to occur within accepted standards:

- Blocks 1 and 9 and portions of Blocks 2,8 and 15 may be subject to Noise Warning Clause A, potentially requiring noise wall mitigation.
- Blocks 1 and 9 may be subject to Noise Warning Clause B requiring noise wall mitigation.
- The potential noise wall locations are identified on Figure 5. A detailed noise
 assessment report would be required to determine the barrier heights and limits to
 mitigate the outdoor living area as per the MOECC criteria.

 Blocks 1, 2, 3 and 9 and portions of Blocks 4, 5, 6 and 15 may be subject to Noise Warning Clause C, requiring provisions for central air conditioning.

4.6 Phase 1 Environmental Site Assessment

In accordance with City practice, a Phase 1 Environmental Site Assessment (ESA) report was completed. In September 2015, the Paterson Group Inc. report concluded that there are no issues of potential environmental concern identified related to potential subsurface impacts on soil and/or groundwater on the site and therefore did not recommend that a Phase 2 ESA Investigation be completed.

4.7 <u>Environment Impact Statement</u>

In July 2016, Kilgour & Associates Ltd. submitted an Environmental Impact Statement. The report's findings suggest that no negative impacts are anticipated to species at risk, species at risk habitats, or natural heritage features as a result of the proposed development.

The report also concludes that no species at risk trees were observed on site. Further, the trees on site (mostly hedgerow species) are unattractive for species at risk habitats.

5.0 CONCLUSION

The application by Glenview for approval of a Draft Plan of Subdivision comprising:

Scenario 1:

117 Lots for single detached dwellings, 17 blocks of townhouses, 2 blocks for parks/open space, 1 school block, 1 stormwater management pond block, 1 commercial block, and 7 streets, or,

Scenario 2:

128 Lots for single detached dwellings, 17 blocks of townhouses, 2 blocks for parks/open space, 1 school block, 1 commercial block, and 8 streets (no stormwater management pond), or,

Scenario 3:

179 Lots for single detached dwellings, 21 blocks of townhouses, 2 blocks for parks/open space, 1 commercial block, and 9 streets (no school or stormwater management pond),

and for approval of an application for Zoning By-law amendment as described in this Report for development at 3387 Borrisokane Road has been fully reviewed from a land use planning perspective.

It is our opinion that approval of the applications for Plan of Subdivision and Zoning By-law Amendment should be granted for the following reasons:

- 1. The approval of the applications is consistent with the Provincial Policy Statement.
- 2. The draft plan of subdivision meets the criteria of Section 51(24) of the Planning Act.
- 3. The proposed development is in conformity with the City of Ottawa Official Plan.
- 4. The proposed development is in conformity with the Barrhaven South Community Design Plan, May, 2006.
- 5. The proposed development is an appropriate use of land and is compatible with adjacent land uses.

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6. The proposed development represents good land use planning.

Prepared by: Reviewed by:

Tyler Duval, M.Pl. Marc Rivet, MCIP, RPP